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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,270	08/02/2000	Christopher M. Carpenter	Q00-1000-US1	8515

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EXAMINER

NGUYEN, MINH DIEU T

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/631,270	CARPENTER ET AL.	
	Examiner	Art Unit	
	Minh Dieu Nguyen	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-110 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 14-21 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-110 is/are allowed.
- 6) ☒ Claim(s) 1,8-11 and 13 is/are rejected.
- 7) ☒ Claim(s) 2-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to the communication dated September 15, 2005 with the amendments to claims 1-11, 13, 26, 61 and 73 and the cancellation of claims 12 and 14-21.

Claims 1-110 are pending.

### ***Response to Arguments***

2. Applicant's arguments dated September 15, 2005 have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments focus on the combination of features introduced by the amendment with statements that already existed in the claims. The new material is rendered obvious by Narasimhalu (5,412,718), Durst, Jr. et al. (5,113,518) and Robinson et al. (4,746,998).

### ***Claim Objections***

3. Claims 8-11 are objected to because of the following informalities:  
"PSUVI" and "non-PSUVI" should be listed out, not in abbreviated form.  
Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, "the content of a hard disk drive" is not limited to tangible products.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Narasimhalu (5,412,718).

Narasimhalu discloses a method for utilizing medium nonuniformities to minimize unauthorized duplication of digital information comprising determining a source fingerprint from the source storage medium (col. 2, lines 18-20), wherein the source fingerprint is a physical attribute of the source storage medium (col. 2, lines 20-25); combining (col. 6, lines 22-23) the source content (i.e. encrypted distributed information) to be secured with the source fingerprint to generate the fingerprinted content (Fig. 6A, element 120; source fingerprint is part of the output of element 120) and instructing the source storage medium to store the fingerprinted content (Fig. 6A, element 140).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhalu (5,412,718) in view of Durst, Jr. et al. (5,113,518) and further in view of Robinson et al. (4,746,998).

a) As to claim 8, Narasimhalu discloses a method for preventing unauthorized copying and use of information which is stored on a storage medium and for restricting the use of such information to designated devices comprising an attribute detector to read a PSUVI characteristic from the one or more storage disks and using this characteristic (i.e. fingerprint/signature) that is unique to a given storage medium to generate a key to encrypt the information on the storage medium (Abstract).

Narasimhalu does not explicitly disclose a hard disk drive comprising a processor, a host processor interface, a servo system, a read/write system.

Durst discloses a method and system for preventing unauthorized use of software comprising a storage medium (Fig. 1, element 116), the storage medium comprising a storage medium processor, a host processor interface, a servo system, a read/write system (Fig. 8).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having comprising a host processor and a storage

medium, the storage medium comprising a storage medium processor, a host processor interface, a servo system, a read/write system in the system of Narasimhalu as Durst teaches so as to implicitly describe a hard disk drive system.

However both Narasimhalu and Durst do not disclose the PSUVI characteristic is a defect list represented by physical block addresses.

Robinson discloses a method for mapping around defective sectors in a disc drive comprising the PSUVI characteristic is a defect list represented by physical block addresses (col. 3, lines 25-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having PSUVI characteristic is a defect list represented by physical block addresses in the system of Narasimhalu and Durst, as Robinson discloses so as to store the media defect information.

b) As to claim 9, this claim is identical to claim 8, except the "non-PSUVI" limitation. From claim 8, PSUVI characteristic of a disk drive is a defect list, so obviously inhere a knowledge of any device that does not have defect list contains non-PSUVI characteristic.

10. Claims 10-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhalu (5,412,718) in view of Robinson et al. (4,746,998).

a) As to claim 10, Narasimhalu discloses an extremely secure fingerprinted content comprising a source content to be secured combined with a fingerprint

generated from a PSUVI of the hard disk drive (col. 4, lines 21-23 defining PSUVI characteristics; Abstract).

However, Narasimhalu does not disclose the PSUVI characteristic is a defect list represented by physical block addresses.

Robinson discloses a method for mapping around defective sectors in a disc drive comprising the PSUVI characteristic is a defect list represented by physical block addresses (col. 3, lines 25-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having PSUVI characteristic is a defect list represented by physical block addresses in the system of Narasimhalu as Robinson discloses so as to store the media defect information.

b) As to claim 11, this claim is identical to claim 10, except the “non-PSUVI” limitation. From claim 10, PSUVI characteristic of a disk drive is a defect list, so obviously inhere a knowledge of any device that does not have defect list contains non-PSUVI characteristic.

c) As to claim 13, Narasimhalu discloses a method for utilizing medium nonuniformities to minimize unauthorized duplication of digital information comprising determining a source fingerprint from the source storage medium (col. 2, lines 18-20), wherein the source fingerprint is a physical attribute of the source storage medium (col. 2, lines 20-25); combining (col. 6, lines 22-23) the source content (i.e. encrypted distributed information) to be secured with the source fingerprint to generate the fingerprinted content (Fig. 6A, element 120; source fingerprint is part of the output of

element 120) and instructing the source storage medium to store the fingerprinted content (Fig. 6A, element 140).

However, Narasimhalu does not disclose the PSUVI characteristic is a defect list represented by physical block addresses.

Robinson discloses a method for mapping around defective sectors in a disc drive comprising the PSUVI characteristic is a defect list represented by physical block addresses (col. 3, lines 25-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of having PSUVI characteristic is a defect list represented by physical block addresses in the system of Narasimhalu as Robinson discloses so as to store the media defect information.

#### ***Allowable Subject Matter***

11. Claims 22-110 are allowed. The prior arts of Durst, Jr. et al. (5,113,518), Narasimhalu (5,412,718), Akiyama et al. (5,805,699) and Noble (6,782,458), by themselves or in combination, discloses the method of claims 22, 51, 61 and 71 where the source content, source fingerprint and the combination of the source content and fingerprint are generated and stored; the authorization to the source content is approved based on the comparison between the source fingerprint with the target/local fingerprint, however those cited prior arts do not disclose the rest of the claimed limitations in claims 22, 51, 61 and 71.



All dependent claims to the above independent claims are allowed based on the same reason.

12. Claims 2-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior arts of Durst, Jr. et al. (5,113,518) and Narasimhalu (5,412,718) fail to disclose the step of the host processor separating the source content to be secured from the source fingerprint of claim 2.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Minh Dieu Nguyen  
Examiner  
Art Unit 2137

mdn  
10/28/05

  
EMMANUEL L. MOISE  
SUPERVISORY PATENT EXAMINER